

CHEBOTAREVA, V. D.:

CHEBOTAREVA, V. D.: "The course of pneumonia in young children under complex treatment with antibiotics". Kiev, 1955. Kiev Order of Labor Red Banner Medical Inst imeni Academician A. A. Bogomolets. (Dissertations for the Degree of Candidate of Medical Sciences.)

So. Kpizhnaya letopis'. No. 49, 3 December 1955. Moscow.

GORODETSKAYA, Ye.G. [Horodets'ka, E.H.], prof.; CHEBOTAREVA, V.D. [Chebotar'ova, V.D.], kand.med.nauk

Features of the course of influenza in young children. Ped., akush.
i gin. 20 no.4:14-17 '58. (MIRA 13:1)

1. Kiyevskiy ordena Trudovogo Krasnogo Znameni meditsinskiy institut
im. akad. A.A. Bogomol'tsa (direktor - dots. I.P. Alekseyenko).
(INFLUENZA)

GORODETSKAYA, E.G., prof.; CHEBOTAREVA, V.D.

Coombs' test during the clinical course of rheumatic fever. Vrach.
delo no.10:1015-1019 0 '59. (MIRA 13:2)

1. Kafedra pediatrii sanitarno-gigiyenicheskogo in stomatologicheskogo
fakul'tetov Kiyevskogo meditsinskogo instituta.
(RHEUMATIC FEVER) (MEDICAL TESTS)

ASKAROV, M.A.; KUCHKAREV, A.B.; CHEBOTAREVA, V.M.

Aryl aliphatic polyamides. Uzb.khim.zhur. no.5:63-67 '58.
(MIRA 12:2)

1. Sredneaziatskiy politekhnicheskiy institut.
(Amides)

ASKAROV, M.A.; FEDOTOVA, O.Ya.; CHEBOTAREVA, Y.M.

Synthesis of mixed polyamides. *Usb. khim. zhur.* no.3:62-65 '60.
(MIRA 13:10)

1. Sredneaziatskiy politekhnicheskiy institut.
(Polyamides)

3-2

USSR/Blood and Hematopoietic Organs

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21706

Author : Chebotareva, V.N.

Inst : Not Given

Title : Agranulocytic Reactions Accompanying Disease of the Respiratory Organs in Young Children

Orig Pub : Nauchn. raboty aspirantov i klinich. ordinatorov Tsentr. in-ta usovorsh. vrachey, 1955, vyp. 3, 99-104

Abstract : In 37 out of 788 children with diseases of the respiratory organs there were a reduction in leucocyte (to 2,500-10,000) and neutrophil counts (to 13% on the average) with a relative lymphocytosis and eosinophilia (up to 14-18%), in some cases. The appearance of leucopenia and neutropenia without eosinophilia, at the onset of disease, may be explained by a viral nature of the upper respiratory tract's catarrh, and the presence of eosinophilia - by sensitization of the body by means of antibiotics, mainly by penicillin. In the majority of cases these reactions disappear without any interference; at times

: 1/2

FEDOTOVA, O. Ya.; ASKAROV, M.A.; CHEBOTAREVA, V.M.

Aryl aliphatic polyamides. Uzb. khim. zhur. no.1:71-80 '60.
(MIRA 14:4)

1. Sredneaziatskiy politekhnicheskiy institut.
(Polyamides)

CHEBOTARSKIY, V.S., inzh.

Review of efficiency promoter suggestions. Sudostroenie 30
no.11:61-62 N '64. (MIRA 18:3)

L 11126-63 EWA(k)/EWT(1)/FBD/BDS/T-2/3W2/EEC(b)-2/ES(t)-2 ASD/AFPTC/
ESD-3/RADC/APGC/AFWL P1-4/Po-4 JHB/WJ/K/EH/IJP(C) S/0288/63/000/001/0117/0118 8/7
ACCESSION NR: AP3000270

AUTHOR: Kolomnikov, Yu. D.; Krivoshekov, G. V.; Troitskiy, Yu. V.;
Chebotayev, V. P.

TITLE: Some characteristics of a gas-discharge laser²⁵

SOURCE: AN SSSR. Sibirsk. otd. Izv., no. 2. Ser. tekhn. nauk, no. 1,
1963, 117-118

TOPIC TAGS: gas-discharge laser, helium-neon laser

ABSTRACT: A conventional helium-neon gas-discharge laser has been built and tested. The device uses molybdenum-glass or pyrex tubes 90 cm long and 1.6 to 1.9 cm in inner diameter and mirrors coated with 15 alternating layers of magnesium fluoride and zinc sulfide. One of the mirrors is fixed, while the other can be moved by micrometer screws around two mutually perpendicular axes. A 50-w rf discharge was used to pump the laser. Oscillation was observed at 1.153 μ ; a weaker oscillation was observed at 1.162 μ . The laser was tested at various pressures and gas ratios. It was found that addition of a small amount of argon decreased the power output. In addition to an He-Ne mixture,

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I 11126-63

ACCESSION NR: AP3000270

pure neon was lased at pressures from 7×10^{-3} to 4×10^{-3} mm Hg at the $1.153\text{-}\mu$ wavelength with a power output 20—30 times less than that produced by the mixture. "The authors express their thanks to colleagues of the laboratory taking part in the work: M. F. Kry'shtal', V. V. Peshetnikov, and I. F. Burmatov. The authors also thank V. K. Solov'yev and V. A. Lazarev, participants in the manufacture of the interference mirrors." Orig. art. has: 2 figures.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Radiophysics and Electronics, Siberian Department, AN SSSR)

SUBMITTED: 16Nov62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: PH, SD

NO REF SOV: 001

OTHER: 002

kes/v
Card 2/2

S/081/62/000/009/064/075
B101/B144

AUTHORS: Askarov, M. A., Fedotova, O. Ya., Chebotareva, V. M.

TITLE: Production of poly-3,3'-dimethyldiphenylmethanazelainamide and its copolymers with AH salt and caprolactam

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 591, abstract 9P36 (Dokl. AN UzSSR, no. 4, 1960, 29 - 31)

TEXT: Polyamides (PA) with molecular weights of 10,000 - 15,000 were produced by polycondensation of: 4,4'-diamino-3,5'-dimethyldiphenylmethane (I) with azelaic acid (II); I, II and AH salt; and I, II and ϵ -caprolactam. When I is polycondensed with II, vitreous PA with a m.p. of 233°C, soluble in cresols, formic, acetic and sulfuric acids, are formed. The polycondensation of I, II and AH salt, as well as that of I, II and ϵ -caprolactam at various molar ratios, gives rise to mixed PA with properties which vary regularly according to the ratios between their components; their m.p. are lower than those of the homogeneous PA and they are more soluble. The physicochemical properties of the polyamides obtained are given.

[Abstracter's note: Complete translation.]
Card 1/1

CHEBOTAREVA, Ye.A.

Care of hypertonic patients in industry. Trudy Kish.gos.med.inst.
13:51-52 '60. (MIRA 16:2)

1. Kafedra gospital'noy terapii Kishinevskogo gosudarstvennogo
meditsinskogo instituta.
(HYPERTENSION)

MANUKYAN, A.A.; GLUSHKOV, V.P.; SHVEDKOVA, V.M.; SVIRIDOVA, Z.P.; ~~CHEBOTA~~
~~REVA, Ye.A.~~; SHUMILIN, V.I.; PUDINA, K.V.; BRAGINA, N.M.; LUTSKAYA,
Ye.Ye.; KODACHENKO, A.S.; KOSOVA, V.A.; MOKLYARSKIY, B.I.; GRECHIKHIN,
A.A.; KULIKOV, N.I.; RYDVANOV, N.F.; BEL'CHUK, A.I.; VINTSER, Yu.I.;
ROZENTAL', Ye.I.; BELOUS, T.Ya.; SIDOROV, V.F.; ZHDANOVA, L.P.;
ALEKSANDROVSKAYA, L.I.; KOVAL', V.V.; KHAVINSON, Ya.S., glavnyy red.;
SOKOLOV, I.A., zam.glavnogo red.; ALEKSEYEV, A.M., red.; ARZUMANYAN,
A.A., red.; BELYAKOV, A.S., red.; BECHIN, A.I., red.; VARGA, Ye.S.,
red.; LERMIN, I.M., red.; LYUBIMOVA, V.V., red.; SKOROV, G.Ye., red.
V redaktirovani uchastvovali: SHAPIRO, A.I., red.; TATISHCHEV, S.I..
KOVIRIGINA, Ye., tekhn.red.

[Economic conditions of capitalistic countries; review of business
conditions for 1958 and the beginning of 1959] Ekonomicheskoe polo-
zhenie kapitalisticheskikh stran; kon'yunktturnyi obzor za 1958 g.
i nachalo 1959 g. Moskva, Izd-vo "Pravda," 1959. 127 p. (Prilo-
zhenie k zhurnalu "Mirovaia ekonomika i mezhdunarodnye otnosheniia,"
no.8, avgust 1959 g.) (MIRA 12:9)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh
otnosheniy. 2. Kollektiv sotrudnikov kon'yunktturnogo sektora Insti-
tuta mirovoy ekonomiki i mezhdunarodnykh otnosheniy AN SSSR (for
Glushkov, Shvedkova, Sviridova, Chebotareva, Shumilin, Pudina, Bragina,
Lutskaya, Kodachenko, Kosova, Moklyarskiy, Grechikhin, Kulikov, Rydva-
nov, Bel'chuk, Vintser, Rozental', Belous, Sidorov, Zhdanova, Alek-
sandrovskaya, Koval'). (Economic conditions)

MANUKYAN, A.A.; RYDVANOV, N.F.; BELOUS, T.Ya.; SVIRIDOVA, Z.P.; CHEBOTAREVA, Ye.A.; SHUMILIN, V.I.; PUDINA, K.V.; LUTSKAYA, Ye.Ye.; BRAGINA, N.M.; SANDAKOV, V.A.; MUSSO, S.; ZABLOTSKAYA, A.I.; VDOVICHENKO, D.I.; MIRKINA, I.Z.; MORENO, I.; SIDOROV, V.F.; MOKLYARSKIY, B.I.; GRECHIKHIN, A.A.; KOSOVA, V.A.; KULIKOV, N.I.; ZHDANOVA, L.P.; ROZENTAL', Ye.I.; PETRANOVICH, I.M.

[Economic conditions of capitalist countries; survey of economic trends in 1961 and the beginning of 1962] Ekonomicheskoe polozhenie kapitalisticheskikh stran; kon'iunkturnyi obzor za 1961 g. i nachalo 1962. g. Moskva, Izd-vo "Pravda," 1962. 157 p.

(MIRA 16:9)

1. Sotrudniki kon'yunktornogo sektora Instituta mirovoy ekonomiki i mezhdunarodnykh otnosheniy AN SSSR.
(Economic history)

CHEBOTAREVA, Ye.D.

Comparative evaluation of various methods for determining the
function of the thyroid gland with the aid of radioactive iodine.
Med. rad. 6 no.1:17-23 '61. (MIRA 14:3)
(THYROID GLAND) (IODINE--ISOTOPES)

POLYANIN, D.V.; ZOTOV, G.M.; GRYAZNOV, E.A.; MENZHINSKIY, Ye.A.; RUBININ, A.Ye.; CHEBOTAREVA, Ye.D.; ZAKHMATOV, M.I.; OKUNEVA, L.P.; SHMELEV, V.V.; STULOV, A.A.; POKROVSKIY, A.N.; SHIL'DKRUT, V.A.; IVANOV, A.S.; NABOROV, V.B.; FINOGENOV, V.P.; KUR'YEROV, V.G.; KHRAMTSOV, B.A.; BATYGIN, K.S.; BOGDANOV, O.S.; KROTOV, O.K.; GONCHAROV, A.N.; KRESTOV, B.D.; LYUBSKIY, M.S.; SOKOL'NIKOV, G.O.; KAMENSKIY, N.N.; YASHCHENKO, G.I.; SABEL'NIKOV, L.V.; GERCHIKOVA, I.N.; FEDOROV, B.A.; STEPANOV, G.P.; BORODAYEVSKIY, A.D.; INGATUSHCHENKO, S.K.; VARTUMYAN, E.L.; KAPELINSKIY, Yu.N., red.; MAYOROV, B.V., red.; NABOROV, V.B., red.; SOLODKIN, R.G., red.; DROZDOV, A.G., red.; ROSHCINA, L., red.; SOLOV'YEVA, G., mladshiy red.; CHEPELEVA, O., tekhn. red.

[The economy of capitalist countries in 1961; economically developed countries] Ekonomika kapitalisticheskikh stran v 1961 godu; ekonomicheski razvitye strany. Pod red. I.U.N. Kapelinskogo. Moskva, Sotsekgiz, 1962. 447 p. (Economic history) (MIRA 16:2)

CHEBOTAREVA, Ye.I.

Novocaine block of the lumbar plexus as conduction anesthesia. Khirurgia,
Moskva no.4:36-37 Apr 1953. (CML 24:4)

GRIBKOV, V.I.; ZHEVANDROV, N.D.; CHEBOTAREVA, Ye.I.

Luminescence polarization in stilbene single crystals as dependent on the wavelength of the radiation at the temperature of liquid nitrogen. *Izv. AN SSSR, Ser. fiz.* 27 no.4:515-518 Ap '63.
(MIRA 16:4)

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR.
(Stilbene crystals--Spectra) (Low temperature research)

L 04467-67 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6018547

SOURCE CODE: UR/0181/66/008/006/1834/1838

AUTHOR: Predvoditelev, A. A.; Rakova, N. K.; Chebotareva, Ye. S.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvenny universitet)

TITLE: Investigation of the motion of dislocations in NaCl crystals during creep

SOURCE: Fizika tverdogo tela, v. 8, no. 6, 1966, 1834-1838

TOPIC TAGS: sodium chloride, creep, crystal dislocation phenomenon, relaxation process

ABSTRACT: This is a continuation of earlier work on NaCl crystals (FTT v. 7, 1081, 1965), in which it was shown that relaxation of stresses at room temperature is determined only by conservative motion of dislocations, and singularities in the law governing this motion were established. The purpose of the present investigation was to determine the motion of dislocations during creep in single-crystal NaCl at room temperature. Soft crystals were used with yield point 120 g/mm^2 and initial dislocation density $\sim 10^5 \text{ cm}^{-2}$. Special apparatus was constructed permitting strains of the order of 10^{-5} cm to be registered at room temperature. The motion of dislocations was investigated by the method of directly etching the samples under load. Quantitative investigations of the dislocation motion could be made only at stresses slightly below the yield point (50 g/mm^2), before intense dislocation multiplication could be observed. At 100 g/mm^2 and higher, the experiments failed because of the

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L 04467-57

ACC NR: AF6018547

large dislocation density. No pronounced dislocation multiplication was observed during the creep. It is concluded that the creep is due only to displacement of already existing dislocations, produced during the initial deformation of the crystal. Some 40% of the dislocations capable of motion participate in the creep. An expression is derived for the calculation of the creep from the measured motion parameters. The good agreement obtained between the calculated and the experimental data gives grounds for assuming, as in the earlier study of stress relaxation, that the non-stationary creep of single-crystal NaCl at room temperature is determined by redistribution of dislocations within the crystal. It is pointed out, however, that there are essential differences in the dislocation motion during creep and relaxation, so data on creep do not apply to dislocation, and vice versa. Orig. art. has: 5 figures, 1 formula, and 2 tables.

SUB CODE: 20/ SUBM DATE: 15Nov65/ ORIG REF: 010/ OTH REF: 016

Card

2/2 *egh*

Chebotareva, Ye. V.

USSR / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21983

Author : Gaidamaka, M.G., Ishchenko-Linnik, K.M., Mikulinskaya, R.M.,
Chebotareva, Ye. V.

Inst : _____

Title : An Experiment in Applying Vi-Agglutination Reaction for De-
tection of Typhoid Bacilli Carriers.

Orig Pub: Sb. tr. Kharkovsk. n.-1. in-ta vaktsin i syvorotok, 1955, 22,
155-157

Abstract: Two cases of applying Vi-agglutination reaction for detection
of enteric typhoid bacilli carriers are described. In the first
case 47 patients were tested by the method of dripping Vi-agglu-
tination on glass; the sera of 8 of these yielded a positive reac-
tion. After numerous examinations of the excreta, the Ebert ba-
cillus was isolated in all 8. The method of drop agglutination:
the Batnagar strain, almost totally devoid of O and N antigens,

Card : 1/3

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USSR / Microbiology. Medical and Veterinary Microbiology. P-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21983

Author : Gaidamaka, M.G., Ishchenko-Linnik, K.M., Mikulinskaya, R.M.,
Chebotareva, Yu. V.

was cultured on hen embryo, after which it acquired the property of yielding a positive reaction with a standard serum at a dilution of 1:25 - 1:50 in 5-10 minutes. An agar culture of this strain was suspended in a drop of serum being tested, which was diluted 1:8 with physiological saline, and it was placed for 10-15 minutes into a moist chamber. In the second case, the sera of 53 exposed persons were examined by the volumetric method. In 2 of these a positive reaction was obtained at a dilution of 1:8, in 5 in a 1:40 dilution. The type of agglutination (in the agglutinoscope) was finely grained. As a Vi-strain the same Batnagar strain was used. In the subsequent excreta examination, the Ebert bacillus was found in 2 out of 7 who yielded a positive Vi-agglutination. The authors believe that the reaction of Vi-

Card : 2/3

-21-

USSR / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21983

agglutination, especially dripping on a glass, presents a sufficiently reliable, least laborious and technically uncomplicated method of detecting typhoid bacillus carriers.

Card : 3/3

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CHEBOTAREVA, Ye. V., Cand Med Sci--(diss) "Clinical characteristic of
scarlet fever in Khar'kov and certain problems of ^{the} pathogenesis and prophy-
laxis of complications." Khar'kov, 1957. 15 pp (Khar'kov State Med Inst),
200 copies (KL, 26-58, 118)

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CHECTAREVA, YU. V., V. S. DEMKACH, AND M. C. GAYDALAKA

"Study of the Antigenic Properties of the Nucleoproteins of Typhoid Bacilli," Trudy
Ukrainskogo instituta epidemiologii i mikrobiologii imeni Mechnikova (Transactions of the
Ukraine Institute of Epidemiology and Microbiology imeni Mechnikov), 1, 17-19, 1947

CHEBOTAREVA, YU. V.

USSR/Medicine --Typhoid

Nov 53

"The Acquired Immunization Reactivity of Carriers of Typhoid and Paratyphoid Bacilli,"
D. G. Manolov, K. I. Vasyurenko, Yu. V. Chebotareva, Kar'kov Inst of Epidem and
Microbiol im Mechnikov

Zhur Mikro, Epid, i Immun, No 11, p 70

Immunization with autovaccine of 5 carriers of typhoid microbes and one carrier of paratyphoid B microbes did not increase the agglutinin titer of the blood or sterilize the carriers. The results were similar on rabbits serving as models for typhoid carriers. The refractory reaction to immunization must have been due to excessive irritation caused by antigens present in the body as a result of continuous activity of the causative factor.

271F54

ZHUK, A.S.; GRES'-EDEL'MAN, V.Ye.; CHEBOTAREVA, Ye. V.; KOZINETS, R.G.;
ROZINA, Ts.S.; POLONSKAYA, Ts.L.

The effect of penicillin therapy on immunologic changes in scarlet
fever. *Pediatrics*, no.5:23-26 S-0 '55. (MIRA 9:2)

1. Iz skarlatinoznoy laboratorii (sav.-kandidat meditsinskikh nauk
B.Ye. Gres'-Edel'man) Khar'kovskogo nauchno-issledovatel'skogo instituta
imeni Mechnikova (dir.-kandidat biologicheskikh nauk G.P. Cherkas)
i 8-y infektsionnoy bol'nitsy (glavnyy vrach Ye. V. Chebotareva)

(SCARLET FEVER, ther.
penicillin, eff. on immunity)
(IMMUNITY
in scarlet fever, err. of penicillin)

SKVIRSKIY, K.L. [Skvirs'kiy, K.L.]; CHEBOTAREVA, Z.A. [Chebotar'ova, Z.A.]

Study of the stability of buffer solutions. Farmatsev. zhurn. 16
no.3:30-32 '61. (MIRA 14:6)

1. Kirovogradskaya kontrol'no-analiticheskaya laboratoriya, mestnyy
punkt Tsentral'noy nauchno-issledovatel'skoy aptechnoy laboratorii
pri Glavnom aptechnom upravlenii Ministerstva zdavookhraneniya
USSR.

(SOLUTIONS (PHARMACY))

CHEBOTAREVICH, M. F.

Sinitskiy, A. A., Chebotarevich, M. F. and Matorina, S. N. "Immunological properties of globulin fractions of antiscarlet fever sera," in symposium: Skarlatina i streptokokkovyye infektsii, Leningrad, 1948, p. 149-62 @
Bibliog: 8 items

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

CHEBOTAROVICH, M.F.

BAZILEVSKAYA, L.S.; BL'KIN, Sh.B.; ~~CHEBOTAROVICH~~, M.F.

Production of complete antigen preparations of low toxicity from
Somme-Kruze bacteria. Report No.2. Zhur.mikrobiol.epid. i immun.
28 no.11:117-120 N '57. (MIRA 11:3)

1. Iz Leningradskogo instituta vaktsin i syvorotok.
(SHIGELLA,
paradysenteriae, antigen prod. (Rus)

USSR/Microbiology - Microbes Pathogenic to Man and Animals. F
Bacteria. Bacteria of the Intestinal Group.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99363

Author : Dazilevskaya, L.S., El'kin, Sh.B., Chebotarevich, N.F.
Inst : -
Title : Attainment of Low Toxicity Preparations of the Total
Antigen of Dysentery Bacteria of Kruse-Sonne. Report II.

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol., 1957, No 11,
117-120

Abstract : The total antigen (TA) was obtained by the method of
Boivin. The antigen from the bacteria of Kruse-Sonne,
as distinguished from the antigen of the microbes of
Flexner, contained more nitrogen (3 times) and phospho-
rus ($1\frac{1}{2}$ times) and less reducing substances (almost 3
times). The first TA was twice as toxic for mice as the
second. The toxicity of TA of the above mentioned bac-
teria decreased during the process of hydrolysis with

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USSR/Microbiology - Microbes Pathogenic for Man and Animals. F
Bacteria. Bacteria of the Intestinal Group.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99363

acetic acid. This decrease depended upon the concentration of the acid and the time of hydrolysis. The TA from bacteria of Kruse-Sonne, Hydrolyzed by 7.5 n. acetic acid for a period of 15 minutes, was 16 times less toxic for mice than the non-hydrolyzed one. The immunogenic properties of TA decreased somewhat during the process of hydrolysis, but were sufficiently pronounced. (First report, see RZhBiol., 1958, 28979).
-- L.M. Vil'ner

Card 2/2

CHEBOTAREVICH, N.D.

Data on endemic (tick-borne) recurrent typhus in Stavropol Territory.
Med. paras. i paras. bol. no.3:272 JI-S '54. (MIRA 8:2)
(RELAPSING FEVER, epidemiology,
Russia)

CHEBOTAREVICH N. D. and YAKOVLEV, I. G.

"On the Prevalence of Ornithodoros Mites in Stavropol' Kray."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

(Stavropol')

KOVALEVSKAYA, I.L.; EPSHTEYN-LITVAK, R.V.; DMITRIYEVA-RAVIKOVICH, Ye.M.;
KURNOSOVA, N.A.; SHCHEGLOVA, Ye.S.; FERDINAND, Ya.M.;
KHOMIK, S.R.; MAKHLINOVSKIY, L.P.; PETROVA, S.S.;
GOLUBOVA, Ye.Ye.; GONCHAROVA, Z.I.; SARMANEYEV, A.P.;
SIZINTSEVA, V.P.; Primalni uchastiye: MEDYUKHA, G.A.;
OSOKINA, L.A.; RACHKOVSKAYA, Yu.K.; OSOVTSEVA, O.I.;
DEDUSENKO, A.I.; KOVALEVA, P.S.; KARASHEVICH, V.P.;
CHEBOTAREVICH, N.D.; CHIGIR', T.R.; SKUL'SKAYA, S.D.;
~~KECHETZHIYEV, B.A.~~; DEMINA, A.S.; ZUS'MAN, R.T.; YESAKOV, P.I.;
SYSOYEVA, Z.A.; ZINOV'YEVA, I.S.; FAL'CHEVSKAYA, A.A.;
DENISOVA, B.D.; TIMOFELEVA, R.G.; SYRKASOVA, A.V.;
LYANTSMAN, S.G.

Reactivity and immunological and epidemiological effectiveness
of alcoholic typhoid and paratyphoid fever vaccines in school
children. Zhur. mikrobiol., epid. i immun. 33 no.7:72-77
Jl '62. (MIRA 17:1)

1. Iz Moskovskogo, Rostovskogo, Omskogo institutov epidemio-
logii i mikrobiologii, Stavropol'skogo instituta vaktsin i
syvorotok i Ministerstva zdravookhraneniya RSFSR. 2. Rostovskiy
institut epidemiologii i mikrobiologii (for Kovaleva).
3. Stavropol'skiy institut vaktsin i syvorotok (for Sysoyeva).
4. Kuybyshevskiy institut epidemiologii i mikrobiologii (for
Zinov'yeva). 5. Saratovskaya gorodskaya sanitarno-epidemiolo-
gicheskaya stantsiya (for Lyantsman).

TRIGALEV, Vassian Nikolayevich; CHEBOTAREVICH, Vsevolod Osipovich; SKOROB-
GATOV, Semen Makeyevich; BRILLOVSKIY, M.I., inzh., retsenzent;
BYCHKOV, M.I., kand. tekhn. nauk, retsenzent; MARCHENKOV, I.A.,
tekhn. red.

[Reinforced-concrete beds for machine tools] Zhelezobetomnye staniny
metalloreshushchikh stankov. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1960. 93 p. (MIRA 14:6)
(Machine tools) (Reinforced concrete construction)

CHIBOTAROVICH, V.I.

Vital link in technological progress. Mekh. i avtom. proizv. 18
no.11:20-29 34 (MIRA 13:2)

1. Predsedatel' Privolozhskogo sojeta narodnogo khozyaystva.

ANDREYEV, N. V., KALYUZHNYI, V. G., KONSTANTINOV, A. S., LIVSHITS, M. P., MANZHOS, F. M.
SAVKOV, Ye. I., USPASSKIY, P. P., FEYGINA, A. Ya., CHEBOTAREVSKIY, V. V., SHEYDMAN, I. Yu

Nemetallicheskiyi materialy, ikh obrabotka i primeneniye (Nonmetallic Materials, Their
Processing and Use) Moscow, Oborongiz, 1949, 535, p. 6,000 copies printed.

Ed. (title page): Kalyuzhnyy, V. G.; Ed. (inside book): Ponomareva, K. A. Tech.
Ed.: Zudakin, I. M.

PURPOSE: This book is intended for students of aviation institutes and other institutes
and it may also be useful to engineering technicians dealing with nonmetal materials.

see card for ANDRYEV, N. V. for abstract.

N CHEBOTAREVSKIY, V. V.

5/

The degree of polymerization of perchlorinated vinyl chloride resins. B. N. Rutovskii and V. V. Chebotarev.

Abstract. J. Applied Chem. U.S.S.R. 23, 1041-4 (1950) (Engl. translation). -Perchlorinated vinyl chloride resin (I), obtained by chlorination at 80° of a PhCl soln. of high-mol. polyvinyl chloride, is useful in high-quality lacquer coatings. Com. samples of I supplied as coned. solns. in PhCl were fractionated by pptn. with gasoline at 20-5°; the optimum concn. of I soln. was 4-5%. The ppt. was more easily washed and dried when gasoline was used for pptn. than with MeOH and EtOH. The 5 fractions obtained differed markedly from each other in sp. viscosity, v. each fraction representing a different degree of polymerization. Fractionation of I from solns. in acetone and PhCl by addn. of MeOH or gasoline showed a narrow range of Cl content in all the fractions and indicated that fractionation took place, not on the basis of different Cl contents, but on that of different degrees of polymerization. Fractionation of 3 com. resins by pptn. with gasoline, b. 110-20°, showed that I is actually a high-mol. product contg. considerable proportions of low-mol. fractions and that domestic resins, P-34 and P-15, are rich in polymers with a sp. η of about 0.2-0.3; Vinoflex PCN contains a high content of polymers with a sp. η of 0.4-0.5 and is more suitable for films.

Neel E. Jaffe

AUTHORS: Chebotarevskiy, V.V., Golovistikov, I.I. 32-12-49/71

TITLE: A Device for the Determination of the Mechanical Durability and Adhesion of Varnish Color Coatings (Pribor dlya opredeleniya mekhanicheskoy prochnosti i adhezii lakokrasochnykh pokrytiy).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1511-1512 (USSR)

ABSTRACT: The device recommended in this paper, which is called adhesiometer-sclerometer, or simply "AT", was constructed on the basis of a schematical drawing similar to that designed by A.A.Snedze, with the difference, however, that the scratch hardness tester is not immobile, but is mounted in such a manner that it can be moved, and that it is possible, if a certain compressive stress is brought to bear upon the varnished surface, to scratch off the coating of varnish, in which case the compressive stress is recorded by means of a dynamometer. The device consists of a base stand upon which a carrier with a plate serving for fastening the varnished sample is mounted. The scratch hardness tester is connected with the dynamometer by means of a lever, a movable frame, and a silk thread. The plate with the clamped on sample can be moved on the rails in one direction: it is fastened by the support on its lower part by means

Card 1/2

A Device for the Determination of the Mechanical
Durability and Adhesion of Varnish Color Coatings

32-12-49/71

of a socket with thread, and can be moved backwards and forwards with any velocity by means of the long propeller shaft it contains. This propeller shaft is driven by an electric motor with adjustable transmission. The scratch hardness tester is described as being the most important part of the device, and a special shape is recommended for it. This part of device serves the purpose of removing a strip of varnish from the varnished surface or, otherwise, the chips of oxidized metal or other materials of not too great hardness which are destined to be examined. For this purpose the necessary power and the velocity of the scratching motion are recorded. There are 2 figures and 1 Slavic reference.

AVAILABLE: Library of Congress

Card 2/2 1. Instrumentation 2. Varnish adhesion-Testers

CHEBOTAREVSKIY, V.V.

GOL'DBERG, Mikhail Markovich; ZAKHAROV, Vasily Aleksandrovich; KAZANSKIY, Yuriy Nikolayevich; LEONT'YEVA, Valentina Petrovna; LOSEV, Ivan Platonovich, doktor khim.nauk, prof.; TROSTYANSKAYA, Yelena Borisovna, doktor tekhn.nauk, prof.; KHAZANOV, Grigoriy Mikhaylovich; CHEBOTAREVSKIY, Vladimir Vladimirovich; SHEYDERMAN, Igor' Yur'yevich; BONDAREV, V.S., inzh., retsenzent; PANSHIN, B.I., kand. tekhn.nauk, nauchnyy red.; TUBYANSKAYA, F.G., izdat.red.; ROZHIN, V.P., tekhn.red

[Nonmetallic materials and their use in airplane construction]
Nemetallicheskie materialy i ikh primenenie v aviastroenii. Pod
obshchei red. I.P.Loseva i E.V.Trostianskoi. Moskva, Gos. izd-vo
obor. promyshl., 1958. 428 p. (MIRA 11:7)

1. Kafedra "Tekhnologiya obrabotki nemetallicheskih materialov"
Moskovskogo aviatsionnogo tekhnologicheskogo instituta i kafedry
"Materialovedenie" Moskovskogo aviatsionnogo ordena Lenina
instituta imeni S.Ordzhonikidze (for all except Bondarev, Panshin,
Tubyanskaya, Roshin)

(Airplanes--Design and construction)
(Nonmetallic materials)

S/123/59/000/010/045/068
A004/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 10, p. 129,
38180

AUTHORS: Chebotarsvskiy, V. V., Vasserman, P. I.

TITLE: The Mechanism of the Protective Effect of Varnish and Paint Coatings
During Humidification 15

PERIODICAL: V sb.: Vses. nauchno-tekhn. soveshchaniye po korrozii n zashchite
metallov, No. 5, Moscow, Profizdat, 1958, pp. 13-14 ✓

TEXT: The failure of the protective effect of varnish and paint coatings when they are being exposed to humid air and sea water, is connected with a number of physical and chemical processes taking place: the diffusion of moisture and electrolyte into the film, osmosis, electrocosmosis, electrochemical corrosion process. When moisture is penetrating into the film, and also under the effect of corrosion products, blisters are originating, on the coating the film is swelling, cracking and peeling off the metal surface, and the high-polymer film-producing part is destroyed on account of saponification. A considerable increase

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S/123/59/000/010/045/068
A004/A001

The Mechanism of the Protective Effect of Varnish and Paint Coatings During Humidification

in the protective effect of varnish and paint coatings can be attained by increasing the structural density of the film, decreasing the hydrophilic nature of the film-producing substance, lowering the content of water-soluble substances in and under the coating, increasing the adhesion of the varnish and paint coating to the metal, increasing the ohmic resistance of the coating, by the presence of alkali-resisting film-producing substances in the film, and also by imparting the coating a passivating ability. This can be attained by introducing into the coating pigments⁵ and corrosion inhibitors or employing primers containing chromate pigments. As to the mechanism of the protective effects, varnish and paint coatings can produce different effects: insulating (i. e. causing a mechanical insulation of the metal surface from the surrounding medium), passivating or combined effect. The latter have been widely used and showed good results under operation conditions.

K. L. M.

Translator's note: This is the full translation of the original Russian abstract.
Card 2/2

AUTHORS: Golovistikov, I. I., ~~Chebotarevskiy, V. V.~~ SOV/32-24-10-46/70

TITLE: The Use of Lamp Heating in the Determination of the Hardness of Varnish Color Coatings (Primeneniye lampovogo nagreva pri opredelenii tverdosti lakokrasochnykh pokrytiy)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 10, pp 1276-1276 (USSR)

ABSTRACT: The pendulum apparatus produced at present at the Khot'kovskiy Eksperimental'nyy zavod okrasochnoy apparatury (Khot'kovskiy Experimental Factory for Dyeing Apparatus) makes possible the determination of the hardness of varnish color coatings only within the temperature range of from 15 to 99°, the heating of the water lasting about two hours. The pendulum apparatus MA7-2 was constructed where the sample is heated by an infrared lamp. The heating takes place rapidly and can be maintained constant between 25 and 300-350°. The apparatus consists of four units: The pendulum apparatus with the lamp, the voltage control of the electric current (type LATR -1 or RNSh-55), a voltmeter, and a potentiometer (type PP) with thermocouples. The lamp SK-2 with 0,5 kilowatt serves as heat source. The automatic control of a constant temperature is accomplished by an electronic control of the type ERM-47, or others. The temperature control

Card 1/2

The Use of Lamp Heating in the Determination of the Hardness of Varnish Color
Coatings

SOV/32-24-10-46/70

is secured by chromel-alumel thermocouples which are connected to the potentiometer **PP**. The tests carried out with this apparatus showed that the hardness of a number of varnish colors varies differently in the case of an increase in temperature. F. F. Klimov and L. B. Dovgalyuk took part in the present work. There is 1 figure.

Card 2/2

5(4)

SOV/69-21-4-4/22

AUTHOR: Vasserman, P.I., Kolotyrkin, Ya.M., Chebotarevskiy, V.V.,
Feoktistova, A.A. (Moscow)

TITLE: The Properties of Paint and Lacquer Coatings as Character-
ized by Their Electrical Resistance and Capacitance

PERIODICAL: Kolloidnyy zhurnal, Vol XXI, 1959, Nr 4, pp 392-397, (USSR)

ABSTRACT: The authors report on experiments intended to characterize
the structure and moisture-proof properties of certain metal
coatings by their electrical resistance and capacitance. The
measuring of the electrical resistance was carried out with an
alternating-current bridge, the scheme of which is illustra-
ted in figure 1 (diagram). The coating materials (perchloro-
vinyl, nitrocellulose, butylmetacrylate, ethylcellulose) were
in the form of thin films (30 - 35 μ) on metal, and in a free
state. The way they were used during the experiments is
likewise illustrated in figure 1. Figure 2 (graph) shows
measuring results concerning the resistance of a nitrocellu-
lose film and the capacitance of the system: platinum electrode-

Card 1/5

SOV/69-21-4-4/22

The Properties of Paint and Lacquer Coatings as Characterized by Their Electrical Resistance and Capacitance.

solution-film-solution-platinum electrode. The results were obtained at a frequency of 1 kilocycle after various time intervals. Previously the film had been immersed into an NaCl solution. The results show that after initially high values, the electric resistance of the film weakens due to a growing liquid absorption, whereas the capacitance of the system is on the increase. Experiments with the above-mentioned materials were carried out to ascertain the dependence of resistance and capacitance on the nature of the film-forming substance. The results are listed in a special table. Figure 3 (graph) shows the effect of alternating current frequency on the electrical resistance of coating films. In most cases the resistance weakens in inverse proportion to the increase of frequency. Film structure, however, exercises a considerable effect on this dependence. The resistance of less compact films weakens to a lower degree than the resis-

Card 2/5

SOV/69-21-4-4/22

The Properties of Paint and Lacquer Coatings as Characterized by Their Electrical Resistance and Capacitance.

tance of compact films. Figure 4 (graph) shows that the effect of frequency on electric resistance grows weaker in proportion to the growth of liquid absorption by the film. Figures 5 and 6 show the effect of electrolytes on the electrical resistance of a film and the capacitance of the system (ethylcellulose film in both cases). The resistance and capacitance values are lower in distilled water than in an NaCl solution. Discussing the results of their investigation the authors conclude that the establishment of a direct correlation between electrolyte concentration and film structure on the one hand and electric conductivity of the film on the other hand is not admissible. A comparison of the data obtained in NaCl solution and in distilled water shows that such a direct correlation does not exist even at the time of the immersion of the film into the liquid. The authors assume that the so-called surface conductivity plays an important role in the conductivity of the films. In this case

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SOV/69-21-4-4/22

The Properties of Paint and Lacquer Coatings as Characterized by Their Electrical Resistance and Capacitance

the total conductivity of the film immediately after immersion can be determined by two components: $K_{\Sigma} = K_1 + K_2$. K_1 is the electric conductivity of the electrolyte in the pores, and K_2 the pore surface conductivity. According to the investigations of I.I. Zhukov and other scientists, the specific weight of surface conductivity in the total conductivity of the film considerably increases at a reduction in pore dimension and a lowering of electrolyte concentration. In dependence on the swelling of the film in the electrolyte, a third component appears, which is due to the conductivity of the film body. In case the equation will have the form $K_{\Sigma} = K_1 + K_2 + K_T$. K_T is the conductivity of the film body. The results of the investigation can be summarized as follows: a relation between the electric resistance, the vapor permeability and the lyophilic properties of metal coatings has been established. Films with low vapor permeability which swell badly in water

Card 4/5

SOV/69-21-4-4/22

The Properties of Paint and Lacquer Coatings as Characterized by Their Electrical Resistance and Capacitance.

are characterized by high electric resistance. The electric conductivity of a coating film is of three components: conductivity of the electrolyte in the pores, surface conductivity in the pores and conductivity of the film body. The conductivity of a film depends on the alternating-current frequency, which, evidently, is due to a change in the surface conductivity in the film pores. There are 5 graphs, 1 diagram, 1 table and 10 references, 4 of which are English, 3 Soviet and 3 German.

SUBMITTED: 7 February, 1958.

Card 5/5

VASSERMAN, P.I. (Moskva); KOLOTYRKIN, Ya.M. (Moskva); CHEBOTAREVSKIY, V.V.
(Moskva); FEOKTISTOVA, A.A. (Moskva)

Properties of paint and lacquer coatings as characterized by
their electrical resistance and capacitance. Koll.zhur. 21
no.4:392-397 JI-Az '59. (MIRA 13:8)
(Paint--Electrical properties)
(Lacquers and lacquering--Electrical properties)

CHEBOTAREVSKIY, Vladimir Vladimirovich; BEREZIN, B.I., otv.red.;
FETISOVA, R.M., red.; ISD-VN; GOLUB', S.P., tekhn.red.

[Lacquers and paints in the national economy] Laki i kraski
v narodnom khoziaistve. Moskva, Izd-vo Akad.nauk SSSR, 1960.
99 p. (MIRA 13:4)

(Lacquer and lacquering)

Z/011/61/018/001/013/014
E112/E453

AUTHORS: Vasserman, P.I. and Chobotarevskiy, V.V.

TITLE: Protective action of primers on magnesium alloy surfaces

PERIODICAL: *Chemie a chemická technologie*, 1961, Vol.18, No.1, p.33, abstract Ch 61-452 (Lakokras. Materialy, 1960, No.1, pp.50-57)

TEXT: Primers on the basis of alkyd resins, polyvinylbutyral and butylmethacrylate were investigated, using as pigments: zinc oxide, titanium dioxide, aluminium bronze and zinc yellow. The coatings were tested for absorbency, permeability, adhesion and resistance to alkalies. Changes of electrochemical properties of the magnesium alloy under the primer were studied. It was established that for an efficient primer a binder is required which has low absorbency and high adhesion, does not contain components which are water-soluble, and is alkali- and corrosion-resistant. For the pigmentation, the use of 25% zinc chromate is recommended. It is further suggested to subject the surface of the alloy to oxidation prior to applying the primer.

Protective action of primers ...

Z/011/61/018/001/013/014
E112/E453

13 diagrams, 1 table, 6 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

CHEBOTAREVSKIY, V.V.; MITKALINNAYA, T.I.

Corrosion-preventing lacquer coatings for lead, copper, and
copper alloys. Lakokras.mat. i ikh.prim. no.2:31-36 '60.

(MIRA 14:4)

(Metal--Corrosion)

(Protective coatings)

CHEBOTAREVSKIY, V.V.; GOLOVISTIKOV, I.I.

Instruments and methods for determining the thickness of coats and films on nonmagnetic metals and other materials. Lakokras.mat.i ikh prim. no.3:62-64 '60. (MIRA 14:4)

(Protective coatings--Testing) (Thickness measurement)

S/196/61/000/010/008/037
E194/E155

AUTHORS: Vasserman, P.I., and Chebotarevskiy, V.V.

TITLE: Determination of the insulating properties of varnish films from their ohmic resistance

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.10, 1961, 21, abstract IOB 95. ("Lakokrasochn. materialy i ikh primeneniye" no.2, 1961, 35-44)

TEXT: A study was made of the relationship between the corrosion-resisting properties of varnish films and a number of properties of the film material, including the electrical conductivity extended to the influence of various factors when the films are wetted in distilled water, and in particular to the influence of the film-forming substance, the influence of film thickness, the method of film deposition and the amount of pigment. The varnish film was considered as a sub-microscopic capillary system; the structural density of such films depends upon the chemical nature of the film forming substance and also on the content of pigment and fineness of its particles. It was found

Card 1/2

Determination of the insulating ...

S/196/61/000/010/008/037
E194/E155

✓

that varnish films of low electrical resistance and high penetrability to moisture vapour are insufficiently protective (corrosion-resistant). A comparatively simple electro-chemical method of determining the insulating properties of varnish films is described; it is based on measuring the resistance of free film when wetted. There is also a diagram, and directions for determining the resistance from the voltage drop in a circuit containing two resistances in series (one resistance box of 100 megohms to 1 kilohm, the other the test film between platinum electrodes). By applying 1 V from a dry battery through a potentiometer, a resistance of up to 1011 ohms can be measured with sufficient accuracy.

16 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

5/081/63/000/001/058/061
B144/B186AUTHOR: Chebotarevskiy, V. V.

TITLE: Thermostable paint and varnish coatings

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1963, 555-556,
abstract IT221 (Lakokrasochn. materialy i ikh primeneniye,
no. 1, 1962, 40-44)

TEXT: K-1 (K-1), K-2 (K-2) and KO-84 (KO-84) organosilicon enamel
varnishes applied to the preliminarily treated surface of C-10 (S-10),
C-45 (S-45) and 30X10A (ZOKhGSA) steel have a long service life at
300°C and a short life at 350°C. The same effect is obtained by applying
this varnish to CH-2 (SN-2), EI-654 (EI-654) and 1X18N9T (1Kh18N9T) steel
after hydraulic sandblasting and passivation or after etching and
passivation. The varnishes no. 9 and KO-88 (KO-88) applied to SN-2,
EI-654 (EP-654) and 1Kh18N9T steels treated with fine cast iron borings
can stand a temperature of >400°C. The etching is done in a bath containing
5 parts by weight HNO₃, 50 parts by weight HCl, 45 parts by weight H₂O, and
FeCl₃ 150 g/l; at 20-45°C for 16-20 min. Passivation is conducted at 40°C
Card 1/3

Thermostable paint and varnish ...

S/001/63/000/001/058/061
B144/B186

in 20% HNO_3 solution. The ground and polished steel surfaces are treated in tanks containing 30-40 g/l $\text{Ba}(\text{NO}_3)_2$, 10-20 g/l $\text{Zn}(\text{NO}_3)_2$ and 8-12 g/l $\text{Zn}(\text{H}_2\text{PO}_4)_2$ at 80°C for 10-15 min with subsequent ageing $\text{K}_2\text{Cr}_2\text{O}_7$ solution (50-80 g/l) at 80°C for 3-5 min. By cold drying, the K-1, K-2 and KO-84 varnishes gain high properties after heat treatment at $150-200^\circ\text{C}$. Aluminum alloys, before being painted are anodized in a sulfuric acid bath depositing a layer of 8-10 μ thickness and then treated in $\text{K}_2\text{Cr}_2\text{O}_7$ solution. Up to 200°C , АП-14 (ALG-14) carbolic-oil or АП-7 (ALG-7) alkyd prime coats are used together with finishes of АЛ-701 (AL-701) varnish of aluminum color green 3-5 (E-5) or black 3-11 (E-11) epoxy varnish. For components working at $>250^\circ\text{C}$, aluminum-colored K-1 and yellow K-2 are taken as prime; green, black, yellow, brown or aluminum-colored K-2, or white and red KO-84 are taken as finish. Three layers are applied having a total thickness of 35-55 μ and the last layer is dried for 2 hrs at $150-200^\circ\text{C}$. Components of magnesium alloys used at $200-225^\circ\text{C}$ are oxidized in tanks and coated with ALG-7 prime and AL-701 or АГ-10с (AG-10c) varnish combined with E-5 varnish or AO polyvinyl butyral laquer. For

Card 2/3

Thermostable paint and varnish ...

S/081/63/000/001/058/087
B144/B186

250-350°C, yellow and green K-3 (K-3) varnish is used, applying 3 layers of 80 μ thickness with subsequent hot drying at 150-200°C. [Abstracter's note: Complete translation.]

Card 3/3

L 41056-65 EPF(c)/EPR/EPA(s)-2/EWP(j)/EWT(m)/EWP(b)/I/EWA(d)/EWP(t) Pc-4/Pr-4/
 Ps-4/Pt-10 IJP(c) RM/WW/JD/WB S/0303/65/000/001/0033/0036
 ACCESSION NR: AP5007143

57
55
B

AUTHOR: Chebotarevskiy, V.V. /

TITLE: Selection of paint-varnish coating compositions for protecting magnesium-alloy products against corrosion 27

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 1, 1965, 33-36

TOPIC TAGS: corrosion prevention, magnesium alloy corrosion, magnesium alloy part, undercoat, metal paint, resin coating, enamel coating, hydrophobic film, oxide film

ABSTRACT: In a review of the current state of the art, the author discusses the mechanism of corrosion of magnesium alloys, the factors increasing and decreasing corrosion, and paint-varnish coatings, used and suggested, as a means of protection. GF-031 alkyd, AG-10c¹⁵ acryl, EP-09 T¹² epoxy, FL-03 phenol-butyric, EG-4¹² epoxy-polyamide, and K-3Zh silico-organic grounds under various combinations of heat-resistant epoxy, alkyd, polyvinyl-butyric and silico-organic enamels, drying in 0.5 - 3 hrs. at 15-200C, are the coatings suggested for preventing corrosion of magnesium alloys under various exposure conditions, with temperature variations from 350 down to -50C.

Card 1/2

L 41056-65

ACCESSION NR: AP5007143

The enamel oxide films which promote adhesion, hydrophobic lubricant films (3 - 5 g/m² of crude vaseline) for preventing vapor permeation, the aggressive gaseous media containing Cl⁻, SO₄⁻⁻⁻, SO₂ and CO₂, the corrosive effect of which was studied in salt cloud chambers, and the harmful effect of Ag, Ni and other alloying additions are discussed. "L. I. Smirnova and A. S. Rebrova participated in the experiments." Orig. art. has: 7 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, MM

NO REF SOV: 000

OTHER: 000

CC
Card 2/2

L 52335-65 EPA(s)-2/EWT(m)/EPF(c)/EWP(1)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/
EWA(c) Pc-l/Pf-l/Fs-l IJP(c) JD/HM/WB/RM

ACCESSION NR: AP5011240

UR/0303/65/000/002/0035/0039

AUTHOR: Chebotarevskiy, V.V.

TITLE: Technology of protecting structures made of magnesium alloys by paint and varnish coatings 15 45 B

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 2, 1965, 35-39 27

TOPIC TAGS: magnesium alloy corrosion, instrument corrosion, metal paint, contact corrosion, galvanic couple, welded alloy 16

ABSTRACT: The article discusses various means of preventing corrosion in instruments made of magnesium alloys: suitable choice of the system constituting the paint and varnish coating, suitable combination of the magnesium alloy with other metals, protection of the sites of contact between unlike metals which might form a galvanic couple, adequate protection in gaps. Specific situations arising in contacts between alloys and protective materials in various types of welding are described in detail, and recommendations are given for each case which are supported by many years of corrosion-free service of instruments made of magnesium alloys under various climatic conditions. "L.I. Smirnova, A.S. Rebrova, and K.P. Kornikova participated in the experimental part of the work."

Card 1/2

L 52335-65

ACCESSION NR: AP5011240

Orig. art. has: 7 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, MT

NO REF SOV: 001

OTHER: 000

Card 2/2

L 40181-66 ENT(m)/ENP(j)/T/ENP(t)/ETI IJP(c) RM/WW/JD/JG/WE

ACC NR: AP6019447 (A) SOURCE CODE: UR/0303/66/000/003/0013/0018 ⁴³/₁₆

AUTHOR: Shtern, M. A.; Daryushevskaya, N. Ye.; Vasserman, P. I.; Chebotarevskiy, V. V.

ORG: none

TITLE: Application of ²⁷calcium ²⁷chromate as an ¹⁶anticorrosion ¹⁶heat-resistant ¹⁶pigment ¹⁶

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 3, 1966, 13-18

TOPIC TAGS: calcium chromate, chromic anhydride, chromate, pigment, anticorrosive agent, heat resistance, *CALCIUM COMPOUND, CHROMATE*

ABSTRACT: A method has been developed for preparing calcium chromate by reaction of hydrated calcium oxide with chromic anhydride. It has been shown that calcium chromate is a pigment which imparts a higher passivating capacity as well as a higher heat resistance to magnesium alloys and steel. It has been established that the use of calcium chromate in soils improves their conservation properties. Orig. art. has: 5 figures and 5 tables. [AM]

SUB CODE: 07.11/ SUBM DATE: none ORIG REF: 001/ OTH REF: 00

Card 1/1

UDC: 667.622.117.6

CHEBOTAREVSKIY, Yu. A. (Moscow).

Rectifier-feeder for the receiver "Iskra." Radio no. 6:45 Je '53.

(Radio--Rectifiers) (MIRA 6:6)

CHEBOTAREVSKIY, Yu. A., inzh.

Mo-8 equipment with KV12 P2000 tubes. Avtom., telem. i svias' no.4s
21-23 Ap '57. (MIRA 11:4)

(Germany, West—Telephone—Equipment and supplies)
(Electron tubes)

CHEBOTAREVSKIY, Yu.A., inzh.

Semiconductor devices. Avtom., telem. i svyaz' no.9:17-19 S '57.

(Semiconductors)

(MIRA 11:4)

Схемотехника

CHREBOTAREVSKIY, Yu.A., inzh.

Semiconductor devices. Avtom., telem. i svyaz' no.12:4-8 D '57.

(Transistors)

(MIRA 10:12)

CHEBOTAREVSKIY, Yu.A., inzh.

Calculation of additional resistances for selectors on SPD-5m bases.
Avton.telem. i svias' 4 no.11:21-24 N '60. (MIRA 13:11)
(Railroads—Electronic equipment)

CHEBOTAREV, Ye.Ye. [Chebotar'ov, YE.YU.]

Effect of bone marrow transplantation on the course and outcome of
radiation sickness. Fiziol. zhur. [ukr.] 8 no.5:687-692 S-0 '62.
(MIRA 17:11)

1. Laboratoriya biofiziki Instituta fiziologii im. Bogomol'tsa AN
UkrSSR, Kiyev.

L 13897-66 EWT(m)
ACC NR: AP5014840

SOURCE CODE: UR/0238/65/011/003/0385/0392

AUTHOR: Chebotar'ov, Ye. Yu. (Chebotarev, Ye. Ye.)

20
B

ORG: Laboratory of Radiation Protection, Institute of Physiology, im. O. O. Rogomol'tsya, Academy of Sciences URSR, Kiev (Laboratoriya radiatsiyynogo zakhystu Instytutu fiziologiyi Akademii nauk URSR)

TITLE: Combined treatment of acute radiation sickness (BK-8, vitamin B₁₂, Batyl alcohol, Bacillin-3)

19.44.85

SOURCE: Fiziichnyy zhurnal, v. 11, no. 3, 1965, 385-392

TOPIC TAGS: radiation sickness, therapy, vitamin, penicillin

ABSTRACT: The author tested the combined action of the BK-8 protein blood substitute, batyl alcohol, vitamin B₁₂ and bicillin-3 on the course of acute radiation sickness in dogs irradiated with x-rays in doses of 600 r. The efficacy of the therapeutic complex was evaluated on the basis of the clinical picture of radiation sickness, the alteration on the morphological composition of the peripheral blood and the fractional composition of the blood serum proteins. The research showed

Card 1/2

2

L 46837-66 EWT(d)/T/EWP(1) IJP(c) GD

ACC NR: AT6014392

SOURCE CODE: UR/0000/65/000/000/0079/0096

AUTHOR: Chebotaru, I. S.

ORG: none

TITLE: One approximation method for solving integral equations of the Wiener-Hopf type

SOURCE: AN MoldSSR. Institut matematiki s vychislitel'nym tsentrom. Issledovaniya po algebre i matematicheskomu analizu (Research on algebra and mathematical analysis). Kishinev, Karta Moldovenyaske, 1965, 79-96

TOPIC TAGS: integral equation, difference equation

ABSTRACT: The integral equation $\varphi(t) - \int_0^{\infty} k(t, s) \varphi(s) ds = f(t)$ ($0 < t < \infty$) is considered in the space $L_1(0, \infty)$. Results of G. Baxter (A norm inequality for a "finite-section" Wiener-Hopf equation, Illinois J. Math., 7, No. 1, (1963), pp 97-103) and of I. Ts. Gokhberg (O metode reduktsii dlya diskretnykh analogov uravneniy tipa Vinera-Khopfa, Ukr. matem. zhurnal 16, No. 6, 1964) are extended to integral equations on a semiaxis with the kernel depending on the difference of the arguments (Wiener-Hopf equation) and to other equations of this type. A theorem regarding the applicability of the reduction method to the Wiener-Hopf equation is stated, proven, and then applied to a solution of conjugate integral equations. The author takes the opportunity to express

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ACC NR: AT6014392

appreciation to I. Ts. Gokhberg for posing the problem and for his helpful advice.
Orig. art. has: 52 formulas.

SUB CODE: 12/ SUBM DATE: 05Feb65/ ORIG REF: 005/ OTH REF: 001

Card 2/2 blg

L 08600-67. EWF(d) IJP(c)

ACC NR: AR6013763

SOURCE CODE: UR/0044/65/000/010/B044/B044

AUTHOR: Chebotaev, I. S.

ORG: None

TITLE: On an approximate method for the solution of Wiener-Hopf integral equations

SOURCE: Ref. zh. Matematika, Abs. 108201

REF SOURCE: Sb. Issled. po algebre i matem. analizu. Kishinev, Kartya Moldovenyaska, 1965, 79-96

TOPIC TAGS: integral equation, Wiener Hopf integral equation, integral equation solution method, approximate method

ABSTRACT: The results of Baxter (Ref.zh. Mat. 1964, 3B360), I. Ts. Gokhberg and V.G. Cheban (Ref.zh. Mat. 1965, 7B424) - are applied to integral equations of the Wiener-Hopf type. Let us show one of the results on an approximate solution of the integral equations pair:

$$\begin{aligned} \varphi(t) - \int_{-\infty}^{\infty} k_1(t-s)\varphi(s)ds &= f(t) \quad (-\infty < t < 0), \\ \varphi(t) - \int_{-\infty}^{\infty} k_2(t-s)\varphi(s)ds &= f(t) \quad (0 < t < \infty). \end{aligned} \quad (1)$$

considered in the space $L_1(-\infty, \infty)$, to which $k_1(t)$ and $k_2(t)$ also belong. Assume fulfillment of the condition

$1 - K_j(\lambda) \neq 0$ ($j=1,2; -\infty < \lambda < \infty$) where $K_j(\lambda)$ is the Fourier transform of $k_j(t)$. We introduce the notations: $\nu_j = \text{ind}(1 - K_j(\lambda))$

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UDC 517.948.32:518

L 08600-67

ACC NR: AR6013763

for $j = 1, 2$; and

$$l_j(t) = \begin{cases} 0, & t > 0 \\ \sum_{\nu=1}^{\infty} c_{\nu} \frac{t^{\nu}}{\Gamma(\nu)} e^{-\nu t}, & t < 0 \quad (\nu = -1, -2, \dots) \\ l_j(t) = l_{-j}(-t) \quad (\nu = 1, 2, \dots), & l_0(t) = 0. \end{cases}$$

THEOREM. Let the functions $k_j(t) \in L_1(-\infty, \infty)$, ($j=1,2$) fulfill the condition (2) and let $\nu_1 = \nu_2$. Then, beginning with some $\tau > 0$, the equation

$$\psi(t) - \int_{-\tau}^t d_1(t-s)\psi(s)ds = f(t) \quad (-\tau < t < 0),$$

$$\psi(t) - \int_{-\tau}^t d_2(t-s)\psi(s)ds = f(t) \quad (0 < t < \tau),$$

where

$$d_j(t) = h_j(t) + l_{\nu_j}(t) - \int_{-\infty}^0 h_j(t-s)l_{\nu_j}(s)ds,$$

has a unique solution $\psi(t)$, with the functions

$$\varphi_j(t) = \begin{cases} \psi(t) - \int_{-\tau}^t l_{\nu_j}(t-s)\psi(s)ds & (t < \tau) \\ 0 & (t > \tau) \end{cases}$$

tending for $\tau \rightarrow \infty$ on the norm of the space L_1 to the unique solution of equation (1).

[Translation].
SUB CODE: 13

Card 2/2 *gd*

SHVARTSBERG, S., inzh.; NOVIKOV, Ye., inzh.; SKVARCHEVSKIY, I.; KORNEV, M.;
CHEBOTAYEV, A., inzh.

Exchange of experience. Avt.transp. 42 no.1:48-50 Ja '64.
(MIRA 17:2)

CHEBOTAYEV, A. B.

97-58-1-11/12

AUTHOR: ~~Chebotayev, A.B.~~ and Khangaldov, N.Ya.
TITLE: "Use of No-Fine Concrete" (Iz opyta primeneniya krupnoporistogo betona). Published by Gosstroyizdat 1955.
PERIODICAL: Beton i Zhelezobeton 1958. No. 1. USSR Pp 37.
ABSTRACT: Favourable criticism of the above mentioned brochure.
1. Concrete--Applications 2. Literature

Card 1/1

SKUBA, V.N., gornyy inzh.; CHEBOTAYEV, A.F., gornyy inzh.

Effect of the tightening of anchors and the type of supports on
the stability of an anchored roof. Ugol' 40 no.4:34-37 Ap '65.
(MIRA 18:5)

1. Noril'skiy gornometallurgicheskiy kombinat.

CHEBOTAYEV, A. P.

N/5
735.591
.D3

Uchet i analiz proizvoditel'nosti truda i zarabotnoy platy v stroitel'-
stve neftyanoy promyshlennosti (Calculation And Analysis Of The Operating
Efficiency And Wages In The Building Up Of The Petroleum Industry, By)
N. A. Denisov i A. P. Chebotayev. Moskva, Gostoptekhizdat, 1952.

128 p. tables.

SKUBA, V.N., inzh.; CHEBOTAYEV, A.F., inzh.; YEVSTRATOV, N.I., inzh.

Devices for controlling the bearing capacity and tension of roof
bolting. Bezop. truda v prom. 8 no.10:52-53 0 '64. (MIRA 17:11)

1. Noril'skiy gornometallurgicheskiy kombinat.

Chebotayev, A.P.
CHEBOTAYEV, A.P.; KHANGALDOV, N.Ya.; KUCHEROV, A.I., inzh., nauchnyy red.;
KRYUGER, Yu.V., red.isd-va; TIKHOMIROVA, T.A., tekhn.red.

[Using coarse porous concrete] Is opyta primeneniia krupno-
poristogo betona. Moskva, Gos.isd-vo lit-ry po stroit.i arkhit.,
1957. 52 p. (MIRA 11:1)
(Concrete construction) (Precast concrete)

GHEBOTAYEV, N. F.

"Using Nettles for Hog Feed," Korm. baza, 3, No 4, 1952

CHEROTAYEV, N. F.

"Jerusalem Artichoke Should be Raised on Collective and State Hog Farms," Korm.
baza 3, No.9, 1952

1. CHEBOTAYEV, N. F.
2. USSR (600)
4. Feeding and Feeding Stuffs
7. The sweet potato is a prospective feed crop for irrigation regions. Korm. baza 3 no. 12, 1952.

9. Monthly List of Russian Accessions. Library of Congress. February 1953. Unclassified.

1. CHEBOTAYEV, N. [F.]
2. USSR (600)
4. Ensilage
7. Potato silage for swine. Kolkh. proizv. 12 No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

CHEBOTAIEV, N. F. FALAMARENKO, I. K.

Pumpkin

Pumpkin is a valuable feed crop. Sots. zhiv. 14 no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952, 2. Unclassified

CHEBOTAYEV, Nikolay Fedoseyevich; DAN'KO, Vasiliy Ivanovich;
LAPSHINA, O.V., red.; BELOVA, N.N., tekhn. red.

[Carrots as feed] Morkov' na korm. Moskva, Sel'khozizdat,
1963. 102 p. (MIRA 16:12)

(Carrots as feed)

DEVYATOV, B.N.; CHEBOTAYEV, P.Z.

Transient modes of continuously operating industrial apparatus.
Trudy Inst. avtom i elektrometr. SO AN SSSR no.8:63-79 '64.
(MIRA 17:11)

KOLOMNIKOV, Yu.D.; KRIVOSHCHIEKOV, G.V.; TROITSKIY, Yu.V.; CHEBOTAYEV, V.P.

Some characteristics of a gas-discharge optical quantum generator.
Izv. SO AN SSSR no.2 Ser. tekhn. nauk no.1:117-118 '63.
(MIRA 16:8)

1. Institut radiofiziki i elektroniki Sibirskogo otdeleniya
AN SSSR, Novosibirsk.
(Lasers)

L 620-64 EWT(1)/EWP(q)/EWT(m)/EWP(b)/BDS/ES(w)-2 AFFTC/ASD/
ESD-3/IJP(C)/SSD Pab-4 JD

ACCESSION NR: AP3008356 S/0288/63/000/002/0123/0123

AUTHOR: Chebotayev, V. P.

TITLE: Pulse oscillation at the 11,530-Å line in neon discharge

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya. ²⁷
tekhnicheskikh nauk, no. 2, 1963, 123

TOPIC TAGS: gas laser, HeNe gas laser, Ne laser, Ne gas laser,
pulsed gas laser, pulsed neon laser

ABSTRACT: A pulse-mode laser action based on the $2S_2-2p_4$ transi-
tion was observed in neon alone in the course of studying an HeNe
gas laser of the type described by Javan (A. Javan, W. R. Bennett,
D. R. Herriott, Population Inversion and Continuous Optical Maser
Oscillation in a Gas Discharge Containing an He-Ne Mixture. Phys.
Rev. Letters, 6, 106(1961)). The discharge was generated by a
7-Mc oscillator modulated by 90-cps square pulses. The rise time
of a pulse was 15 μ sec. The discharge tube was 95 cm long and
1.5 cm in diameter. The Fabry-Perot 15-layer mirrors were adjusted

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ACCESSION NR: AP3008356

with respect to maximum power output of an HeNe laser; the HeNe mixture was then removed and the tube filled with neon. Pulse oscillation started at a neon pressure of $9-10^{-2}$ mm Hg and lasted 20-30 μ sec at half-power level; peak power output reached 120 w (oscillator rating). Pulse power was about 20-30 times lower than that of the HeNe laser. CW oscillation was observed at lower neon pressures at the 11,530-Å line. Attempts to detect laser action after discharge cutoff failed. Orig. art. has: 1 figure.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Radio Physics and Electronics, Siberian Branch, AN SSSR)

SUBMITTED: 24Dec62

DATE ACQ: 14Oct63

ENCL: 00

SUB CODE: PH

NO REF SOV: 000

OTHER: 001

Card 2/2

CHEBOTAYEV, V.P.

Use of electron scattering for gas pressure measurement. Prib. i tekhn. eksp. 8 no.2:176-177 Mr-Ap '63. (MIRA 16:4)

1. Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR.
(Electrons—Scattering) (Helium) (Neon)

I 5651-65 EWT(1)/EWT(m)/EPF(c)/EWP(q)/EWP(b) Pr-4 ESD(ES) JD
ACCESSION NR: AP4045467 S/0288/64/000/002/0121/0124

AUTHOR: Chebotayev, V. P.

48

47

TITLE: Selective excitation of argon ions by metastable helium atoms

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 2, 1964, 121-124

TOPIC TAGS: argon, helium, metastable helium, argon ion, argon spectrum, argon ion excitation, selective excitation, inelastic collision

ABSTRACT: The author presents some data on non-elastic collisions of excited atoms with ions of an allogenic gas with transfer of excitation to the ions: $A^I + B^+ = A^{+I} + \Delta E$. The gas pair used in the study was composed of argon and helium. The considerations which led to this selection are discussed, along with the structure and pertinent parameters of the hollow-cathode discharge tube. A recording made on an IKS-12 spectrograph is presented which shows the argon spectrum in the blue-violet region at a discharge current of 700 milliamperes and an argon pressure of 0.4 mm Hg. A spectral recording of the discharge in the helium-argon mixture with an argon pressure of 0.4 mm Hg and a helium pressure of 6 mm Hg, again at a discharge current of 700 ma, is also shown. A comparison of the intensity of the spark lines of the argon in the pure argon discharge and in the
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ACCESSION NR: AP4045467

helium-argon mixture points to the selective character of the excitation of the individual argon ion levels by the metastable helium atoms. A table is given which illustrates the ratios of the intensities of several argon ion lines to the intensity of the $\lambda 4103 \text{ \AA}$ line in the discharge in argon K_1 and in the mixture of argon and helium K_2 . The table reveals the resonance character of the transfer of excitation from the helium to the argon ions. The ratio of the factors $\frac{k_2}{k_1}$ indicates the effectiveness of argon ion excitation by metastable helium atoms in comparison with electronic excitation of argon ions under the conditions of discharge postulated in the article. The author also considers, and shows in graph form, the dependence of the intensity of several lines on helium pressure for a discharge current of $I_{dis} = 600 \text{ ma}$ at an argon pressure of 0.4 mm Hg . Finally, the relative concentration of metastable helium atoms as a function of helium pressure, with the discharge current held constant, was measured and analyzed. Orig. art. has: 2 tables, 3 figures and 3 formulas.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR, Novosibirsk (Institute of Radio Physics and Electronics, Siberian Branch, AN SSSR)

SUBMITTED: 28Mar63

ENCL: 00

SUB CODE: IC, NP

Card 2/2 NO REF SOV: 001

OTHER: 001

L 63965-65 EWA(k)/FBD/BXP/ENG(r)/EWT(1)/EPA(s)-2/EWT(m)/EPF(c)/EEC(k)-2/
 EPF(n)-2/EPA(w)-2/T/EWP(t)/EEC(b)-2/EWP(k)/EWP(b)/EWA(m)-2/EWA(h) SCTB/IJP(c)

ACCESSION NR: AP5016045

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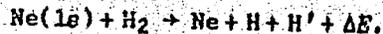
AUTHOR: ⁴⁴ Chebotayev, V. P.; Vasilenko, L. S. ⁴⁴

TITLE: Emission of a neon-hydrogen laser in a hollow cathode discharge ⁴⁴
_D

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 5, 1965, 418-423 ²¹

TOPIC TAGS: gaseous state laser, laser emission, neon, hydrogen, gas discharge

ABSTRACT: ^{25, 44} The authors study the operation of a laser based on a mixture of Ne and H₂ (Ne transitions 2s-2p) in a hollow cathode, and also the population inversion mechanism in this system at current densities up to 300 ma/cm². Two processes are involved in the population inversion between the 2s and 2p levels in neon: selective excitation of the 2s₄ and 2s₅ levels in the neon-hydrogen mixture, and the annihilation of the metastable neon atoms by hydrogen molecules. The selective excitation mechanism is associated with the process of dissociation recombination. The concentration of metastable neon atoms in the discharge in the hollow cathode is determined by the rate of annihilation of Ne(1s) by molecular hydrogen:



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ACCESSION NR: AP5016045

For large cross sections, this process does not require strict energy coincidence since three particles are involved, which permits conservation of energy and momentum at energy differences of 1-2 ev. Experimental measurements showed that the annihilation cross sections for the $1s_2$, $1s_3$, and $1s_4$ levels are approximately identical (of the order of $5 \cdot 10^{-16} \text{ cm}^2$). The value for the $1s_5$ level is $2 \cdot 10^{-16} \text{ cm}^2$. Apparently other processes of neon annihilation are insignificant. Emission was observed at the 11143 Å line for a 7.5 cm discharge. When the discharge length is increased to 15 cm, emission is observed on four more lines: 11177, 11523, 11525, and 11790 Å. Conditions for radiation were studied with respect to the strongest line, 11143 Å ($2s_4-2p_8$). Conditions for radiation on the other lines are close to those for this line. Emission takes place at $\text{H}_2:\text{Ne}$ pressure ratios of 0.1-5 when the total pressure of the mixture is 0.3-0.4 mm Hg. The optimum discharge current is proportional to the hydrogen pressure. Experiments showed a linear relationship between optimum discharge current and hydrogen pressure up to 1-1.5 mm Hg. Curves of amplification as a function of current density for two different hydrogen pressures are given in fig. 1 of the Enclosure. Orig. art. has: 3 figures and 4 formulas.

[14]

ASSOCIATION: none

SUBMITTED: 28Sep64

NO REF SOV: 008
Card 2/3

ENCL: 01

OTHER: 001

SUB CODE: EC

ATD PRESS: 4071

L 63965-65

ACCESSION NR: AP5016045

ENCLOSURE: 01

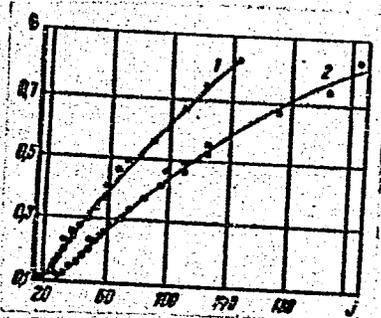


Fig. 1. Amplification G (%/cm) at 11143 Å in the Ne-H₂ discharge as a function of current density j (ma/cm²) at a neon pressure of 0.6 mm Hg

1 - H₂ pressure 0.7 mm Hg; 2 - H₂ pressure 1.4 mm Hg.

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